



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

September 9, 2016

Audra Zentner  
Assistant Director  
Regulatory  
Bonide  
6301 Sutliff Road  
Oriskany, NY 13424

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 – minor label notification to revise some language and add marketing statement  
Product Name: Bonide Root & Grow  
EPA Registration Number: 4-431  
Application Date: 24 August 2016  
OPP Decision Number: 520803

Dear Ms. Zentner:

The U.S. Environmental Protection Agency (EPA) is in receipt of your application for notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Biopesticides and Pollution Prevention Division (BPPD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The labeling submitted with this application has been stamped “Notification” and will be placed in our records. You must submit one (1) copy of the final printed labeling with the modifications.

Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance Assurance.

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If you have any questions, please contact Cody Kendrick of my team by phone at (703) 347-0468 or via email at [kendrick.cody@epa.gov](mailto:kendrick.cody@epa.gov).

Sincerely,

A handwritten signature in blue ink that reads "Andrew C. Bryceland". The signature is fluid and cursive, with the first name being the most prominent.

Andrew Bryceland, Team Leader  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)  
Office of Pesticide Programs

Enclosure

[MASTER LABEL]



NOTIFICATION

4-431

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

09/09/2016

# ROOT & GROW®

## Root Stimulator & Plant Starter

[Additional Brand Name: Calloway's Amazing Roots Root Stimulator, Garden Rich Root & Grow Root Stimulator and Plant Starter, Garden Rich Trusted Since 1926 Bonide Root & Grow Root Stimulator and Plant Starter, Trusted Since 1926 Bonide Garden Rich Root & Grow Root Stimulator and Plant Starter]

### Optional Marketing Statements:

- For use on ornamental plants, listed vegetables, fruits, nuts and berries.
- N-P-K [final printed label to reflect actual primary nutrients based on fertilizer blends used in formulation; e.g., 4-10-3, 5-10-5]
- Stimulates Early Root Formation, Stronger Root Development
- Helps Reduce Transplant Shock and Promotes More Vigorous Plant Growth
- Provides Nutrients for Seed Germination
- Root Stimulator
- Reduces Transplant Shock
- Contains IBA [growth][root][plant] stimulant
- With growth hormone IBA
- Contains a balanced plant food for feeding throughout the growing season.
- For use at seeding, transplanting, and throughout the growing season.
- Ideal for [Transplants] [Houseplants] [Lawns] [Vegetables] [Fruit Trees] [Berries] [Flowers] [Trees] [Shrubs] [Ornamentals]
- Promotes vigorous plant growth
- For use on [Transplants] [Houseplants] [Lawns] [Vegetables] [Fruit Trees] [Berries] [Flowers] [Trees] [Shrubs] [Ornamentals]
- For use on established plants, new seedings, and transplants!
- Plant Growth Regulator plus fertilizer
- Plant Growth Regulator and fertilizer
- Covers [312 sq. ft.] [625 sq. ft] [2,500 sq. ft] when used on lawns
- Also Contains Hormone Type Root Stimulator and Fertilizer that Aids Development of Fast-Strong Root Structure and Vigorous Plants
- 3½ Tablespoons per Gallon of Water
- Concentrate
- **Contains IBA root stimulator**

**ACTIVE INGREDIENT:**

Indole-3-butyric acid..... 0.0004%

**OTHER INGREDIENTS:**..... 99.9996%

**TOTAL**..... 100.0000%

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

See back/side/other panel(s) for First Aid and additional Precautionary Statements

[Guaranteed Fertilizer Analysis to reflect plant nutrients based on fertilizer blend used in formulation]

**GUARANTEED ANALYSIS**

**X-X-X**

Total Nitrogen (N) .....X.XX%

X.XX% Ammoniacal Nitrogen

Available Phosphate (P<sub>2</sub>O<sub>5</sub>) .....XX.XX%

Soluble Potash (K<sub>2</sub>O).....X.XX%

Derived from XXXXX.

F1290

In Mississippi (MS): Low Analysis Fertilizer

Information concerning the raw materials composing this product can be obtained by writing to the Guarantor listed below, and referring to the batch number found on this container.

Information regarding the contents and levels of metals in this product is available on the internet at <http://aapfco.org/metals.html>

**NET CONTENTS: 1 PT (473 ml)/ 1 QT (946 ml)/64 FL OZ (1.89 l)/1 GAL (3.785 l)**

**NET WEIGHT: 1.15 LB (.5 kg)/2.3 LB (1.0 kg)/4.7 LB (2.13 kg)/9.2 LB (4.2 kg)**

**FIRST AID**

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.

**If On Skin or Clothing:**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

**If In Eyes:**

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

**PRECAUTIONARY STATEMENTS**

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

**ENVIRONMENTAL HAZARDS:** To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

### STORAGE AND DISPOSAL

**Pesticide Storage:** Store and transport in an upright position. Store product in original container in a locked storage area.

**Pesticide Disposal:** *If partly filled* – Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

**Container Disposal:** *If empty* – Nonrefillable container. Do not reuse or refill this container. Place in trash or offer for recycling if available.

### FOR HOMEOWNER USE ONLY

**WHAT IS THIS PRODUCT FOR?** Use **BONIDE® Root & Grow®** anytime you are seeding or transplanting to stimulate early root formation and stronger root development, to help reduce transplant shock, and to promote more vigorous plant growth. **BONIDE® Root & Grow®** can also be used as listed throughout the growing season to provide plant nutrients that ~~sustain optimal plant growth and development~~ **help optimize plant growth and development.**

**HERE ARE THE RESULTS YOU MAY EXPECT:** This product helps plants become established quickly and helps insure vigorous growth.

### HOW TO USE: (SHAKE WELL BEFORE USE)

This product is concentrated and must be diluted with water according to the following rates before use on flowers, shrubs, trees or houseplants.

3½ Tbs. per gallon of water    1 pint in 9½ gallons of water    1 quart in 19 gallons of water

[Optional How to Use directions to be used for containers with measuring-cup caps: Mix ½ capful (3½ Tbs.) per gallon of water.]

### ORNAMENTAL PLANTS

#### Flowers, Shrubs, Groundcovers, Trees:

*For Transplants:* Use 1 to 8 pints of *diluted* solution per plant, depending on size. For example, use 1 pint of the mixture on mums, geraniums and other annual flowers. For rose bushes, azaleas, gardenias, camellias, and other shrubs, use 3 pints per plant. For plants larger than 4 ft. (trees and large shrubs) use 1 gal. or more of the mixture per plant. Pour diluted solution over the soil as the roots are being covered, making sure that the roots are wet with the

solution. Wet soil around plant with water after planting.

*For Seeding:* After seeds are covered with soil, water thoroughly using 1 gallon of *diluted* solution per 250 sq. ft. of plant bed. Water thoroughly.

*For Established Plants:* Use 1 gallon of *diluted* solution per 250 sq. ft. Apply at first signs of new growth in spring and repeat every 4-6 weeks throughout the growing season. Water thoroughly.

**Houseplants:** Use ½ cup *diluted* solution per quart of soil (a 6 in. pot holds approximately 1 quart). Reapply every 6-8 weeks.

**Lawns:**

*For Seeding/Sodding New Lawns:* Dilute 1 gallon **BONIDE® Root & Grow®** in 10-15 gallons of water to cover 2,500 sq. ft. (1 quart in 2½ to 3¾ gallons of water to cover 625 sq. ft.) (1 pint in 1¼ to 2 gallons of water to cover 312 sq. ft.). Apply using a hose-end sprayer or pressure-type tank sprayer. Water thoroughly to soak into the root zone.

**[Optional language as required by state fertilizer regulations:**

A lawn will typically utilize 1 to 4 lbs. of nitrogen per 1,000 sq. ft. per growing season. When used as directed, this product will supplement your regular fertilizer program by providing XXX lbs. of nitrogen per 1,000 sq. ft. Please consult your local extension office for questions regarding a regular fertilizer program.

Do not apply near water, storm drains or drainage ditches. Do not apply if heavy rain is expected. Apply this product only to your lawn or garden, and sweep and product that lands on the driveway, sidewalk or street back into your lawn or garden. Check with your local Cooperative Extension Agency to obtain specific information on local turf best management practices. Check with your county or city government to determine if there are local regulations for fertilizer use.

**If fertilizer formula contains N – the following text may be featured when distributed into states with applicable nitrogen application rate restrictions:**

In (insert state), do not exceed [insert number ≤ 1 gallon] of product per 2,500 sq. ft. per application. Do not exceed [###] applications per year. Make any subsequent fertilizer applications with Low or No Phosphate fertilizers.

**If fertilizer formula contains P – the following text may be featured when distributed into states with applicable phosphorus application rate restrictions:**

**Maryland Applications:**

This fertilizer contains phosphorus and may not be used on turf in the state of Maryland except when 1) providing nutrients to specific soils and target vegetation as determined to be necessary in accordance with a soil test that was conducted by a laboratory identified under §8-803.7 of the Agriculture Article, Annotated Code of Maryland, performed no more than 3 years before the application; 2) establishing vegetation for the first time, such as after land disturbance, provided the application is conducted in accordance with the recommended application rates established by the State; or 3) reestablishing or repairing a turf area.

**Virginia Applications:**

In Virginia this lawn/turf fertilizer contains phosphorous and is only for nonagricultural use on (i) turf during its first growing season, (ii) on turf areas being repaired or renovated, and (iii) on turf where a soil test performed within the last 3 years indicates a phosphorous deficiency. This fertilizer is not for the routine maintenance of turf.]

**Recommended Crops:** The following is a broad listing of crops on which this product is recommended for use. A brief listing of crops within each grouping is given after the group name as an example of those crops represented. The examples given are not meant to be an exhaustive list of those crops within any grouping, and should not be construed as such.

*Row or Band and Injection Applications:* Use at the rate of 3½ to 4½ fluid ounces per 1,000 sq. ft.

*Broadcast Applications:* Use at the rate of 7½ to 8½ fluid ounces per 1,000 sq. ft.

**VEGETABLES:**

**BRASSICA (COLE) LEAFY VARIETIES:** (Broccoli, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Chinese Mustard, Collards, Kale, Kohlrabi, Mustard Greens, Rape Greens)

**CUCURBITS:** (Cantaloupe, Casaba Melons, Cucumbers, Gherkins, Gourds, Honeydew Melons, Mango Melons, Muskmelons, Pumpkins, Summer Squash, Watermelons, Winter Squash)

**LEAFY VEGETABLES (EXCEPT BRASSICA):** (Celery, Cress, Endive, Fennel, Lettuce, Orach, Spinach, Swiss Chard)

**ROOT, TUBER AND BULB VEGETABLES:** (Artichokes, Burdock, Carrots, Cassava, Chicory, Garlic, Ginger, Ginseng, Horseradish, Leek, Onion, Parsley, Parsnip, Potato, Radish, Rutabaga, Salsify, Shallot, Sweet Potato, Turnips, Yams)

**FRUITING VEGETABLES:** (Bell Peppers, Chile Peppers, Cooking Peppers, Eggplant, Ground Cherry, Pepinos, Pimentos, Sweet Peppers, Tomatillo, Tomatoes)

**LEGUMES:** (Beans including *Lupinus spp.*, *Phaseolus spp.*, and *Vigna spp.*, Broad Beans, Chick Peas, Guar, Jackbean, Lablab Beans, Lentils, Peas, Soybeans.)

**TREE CROPS:**

**CITRUS:** (Calamondin, Grapefruits, Kumquats, Lemons, Limes, Oranges, Tangelos, Tangerines)

**NUTS:** (Almonds, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filberts, Hickory Nut, Macadamia Nut, Pecan, Walnut)

**POME FRUIT:** (Apple, Crabapple, Mayhaw, Pear, Quince)

**STONE FRUIT:** (Apricots, Cherries (Sweet and Sour), Nectarines, Peaches, Plums, Prunes)

**SMALL FRUITS AND BERRIES:** (Blackberries, Blueberries, Boysenberries, Cranberries, Currants, Dewberries, Elderberries, Gooseberries, Grapes, Huckleberries, Olallieberries, Raspberries, Strawberries, Youngberries)

For information on pesticide products (including health concerns, medical emergencies, or

pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

To the extent consistent with applicable law, buyer assumes all risks of use, storage or handling of this product not in strict accordance with directions given herewith.

[Batch Code to be inserted at production]

Manufactured/Guaranteed by:  
Bonide Products, Inc.  
6301 Sutliff Road  
Oriskany, NY 13424